

- 5 We claim:
1. A novel process for the recovery of a macrolide in substantially pure form comprising:
    - a) treatment of an impure or crude macrolide with water immiscible solvent,
    - 10 b) optional concentration of the mixture,
    - c) treatment with ammonia gas to phase out impurities,
    - d) separation of impurities,
    - e) optional concentration of the phase containing the macrolide,
    - 15 f) loading on silica gel chromatography, optionally reversed phase or pretreated with silver, and elution of the macrolide,
    - g) affording the macrolide in substantially pure form,
    - h) optional repetition of step f and g to afford the macrolide in substantially pure form.
  2. A process as in claim 1, wherein the macrolide is selected from tacrolimus, immunomycin or sirolimus.
  3. A process as in claim 1, wherein the water immiscible solvent is selected from a group comprising hydrocarbons, 25 heterocyclic compounds, ethers or esters.
  4. A process as in claim 1, wherein the water immiscible solvents is selected from a group comprising benzene, toluene, hexane, ethyl acetate, isobutyl acetate or butyl acetate.
  - 30 5. A process as in claim 1, wherein the macrolide compound is afforded by crystallization or precipitation.

- 5 6. A process as in claim 1, wherein the crystallization is carried out using solvents selected from ethyl acetate, diethyl ether, acetonitrile, and hexane.
7. A process as in claim 1, wherein the macrolide is obtained by fermentation.
- 10 8. A process as in claim 1, wherein the macrolide is obtained by synthetic process.
9. A process as in claim 1, comprising:
- a) treatment of an impure or crude macrolide with water immiscible solvent,
  - 15 b) optional concentration of the mixture,
  - c) treatment with ammonia gas to phase out impurities,
  - d) separation of impurities,
  - e) optional concentration of the phase containing the macrolide,
  - 20 f) loading on silica gel chromatography and elution of the macrolide,
  - g) optional concentration and mixing with water immiscible solvent,
  - h) affording macrolide in purer form,
  - 25 i) loading on silica gel chromatography pretreated with silver and elution of the macrolide,
  - j) affording the macrolide in substantially pure form.
10. A process as in claim 1, comprising:
- a) treatment of an impure or crude macrolide with water immiscible solvent,
  - 30 b) optional concentration of the mixture,

- 5           c)    treatment with ammonia gas to phase out impurities,  
            d)    separation of impurities,  
            e)    optional concentration of the phase containing the  
                  macrolide,  
            f)    loading on silica gel chromatography and elution of the  
10           macrolide,  
            g)    optional concentration and mixing with water  
                  immiscible solvent,  
            h)    affording macrolide in purer form,  
            i)    loading on reversed phase silica chromatography and  
15           elution of the macrolide,  
            j)    affording the macrolide in substantially pure form.